SATIUX HD+ SC PVR









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21. Service Slip...... as PDF attachment

Note: The SATNUX carries the CE-Sign and fulfills all requirements from the EU. Subject to change without prior notification.

1. Before initial operation of the receiver

1.1 Safety instructions

Please read the safely instructions completely and carefully, before using the SATNUX. The Manufacturer takes no responsibility for damages as a result of incorrect handling of the SATNUX.

- >- Allow enough space around the SATNUX for sufficient ventilation.
-)- Do not cover the top of the SATNUX and allow enough space to other devices. The louvers of the devices must be free at all times to allow sufficient healtransfer from inside the device.
- > Never put vases or any other liquid filled containers on top of the device. Do not expose the device to dripping or splashing liquids.
- > Do not place open flame sources, such as lit candles, on top of the device.
- >- The device may only be operated in moderate climate.
- > Do not remove the cover.Risk of electric shock. If it is necessary to open the device please contact a trained professional.



- > Do not put any metal things into the slots or ventilation openings.
- > The installation of a hard disk is only allowed by skilled personal or your local dealer.





Modifications and changes to the SATNUX lead to loss of warranty if not perfonned and documented by skilled personal.

We recommend the installation of a hard disk by your local dealer. Unskilled installation of a hard disk leads to loss of warranty.

Shut down

In case your SATNUX is in use for a longer period of time disconnect the power plug from the power outlet.

During thunder storm the unit should also be physically disconnected from the power outlet.

Additional safety instructions

(Dis-)Connecting to a LNB:

Turn the SATNUX off before you connect or disconnect a cable coming from or going to a LNB.

Connecting to a TV:

Before connecting or disconnecting your SATNUX to/from a TV please turn it off.

In case you notice any damage to the power cord or power plug immediately disconnect the device from the power outlet.

In case the device was exposed to humidity immediately disconnect the device from the power outlet.

In case you notice any serious damage to the outer shell of the device immediately disconnect the device from the power outlet.

Do not expose the SATNUX to direct sunlight, lightning or rain.

Grounding:

The LNB cable must be grounded.

The grounding system must meet SABS 061 requirements.

Cleaning:

Disconnect the mains power cord before cleaning the cover. Use a slightly damp cloth without cleaning agents.

Connect the SATNUX only to suitable sockets. Do not allow overloads to occur.

Please be careful that the batteries of your remote control are not exposed to heat, since they might explode.

Disposal instructions

The packaging of the SATNUX only consists of reusable materials. Please recycle if possible.

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.



For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

Please note that empty batteries and electric waste is not to be put into the regular garbage.

1.2 **Packaging contents**

Please check the completeness of the box's contents. Included in box:







Remote control



2 Batteries (1,5V Mignon / AA / LR6)





1 Power cord



1 User manual (most recent version online: http://www.TV-RADIO-SHOPPEN.DK)



1 DVI to HDMI cable



1 Rear panel for C!T-Tuner operation



1 Scart to Video/Audio-Adapter



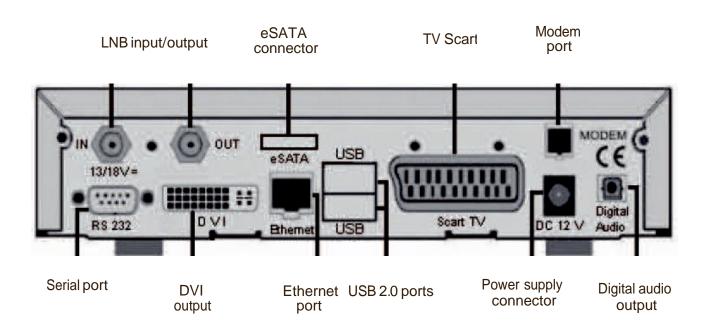
1 SATA cable including power cord for a 2,5" SATA-Harddisk

1.3 Views

Front view



Rear view



1.3.1 Explanation Front Panel

Smartcard reader

Insert your SATNUXcrypt Smartcard with the golden chip facing down and forward into one of the two Smartcard reader slots. SATNUXcrypt is a registered trademark of SATNUX.

Remote control sensor

The remote control sensor receives the infrared signals of the SATNUX Remote Control.

Power button

The Power-Button switches your SATNUX on and off.

1.3.2 Explanation rear panel

LNB input (DVB-S Tuner)

Connect the coaxial cable from your LNB here.

LNB output (DVB-S Tuner)

You can connect an analog/digital receiver here. Remember to shutdown your SATNUX into Deep-Standby-Mode in order for the receiver to work.

Antenna in (DVB-C/T Tuner)

Connect the coaxial cable from your antenna here.

Antenna out (DVB-C/T Tuner)

You can optionally connect your TV or VCR here.

eSATA connector

You can connect an external SATA Hard disk.

Note: Please note, that this connector only works, if no hard disk is installed internally.

Modem port

You can optionally connect your SATNUX to your ISP via the Modem Socket using a phone line.

Serial port (RS232C, Sub-D, 9-pol.)

The Serial Port is used to update the operating system. Please connect a serial null modem cable here.

Network interface (Ethernet 10/100Mbit, RJ45)

The Communication Port is an Ethernet port. It is used to communicate with your SATNUX via HTTP, FTP, NFS, Telnet and Samba to access your recorded movies, to upload channel lists, etc. This port is also used to update the operating system of your SATNUX. Please use a regular patch cable to connect your SATNUX to your LAN.

DVI output

You can connect a TV to the DVI out of your SATNUX if your TV has the right input.

USB 2.0 ports

The USB 2.0 Port is designed for devices that support the USB 2.0 standard. The amount of supported USB devices depends on the installed image (Software) and is still under development.

TV Scart

Connect your TV, projector or beamer to your SATNUX using a Scart cable.

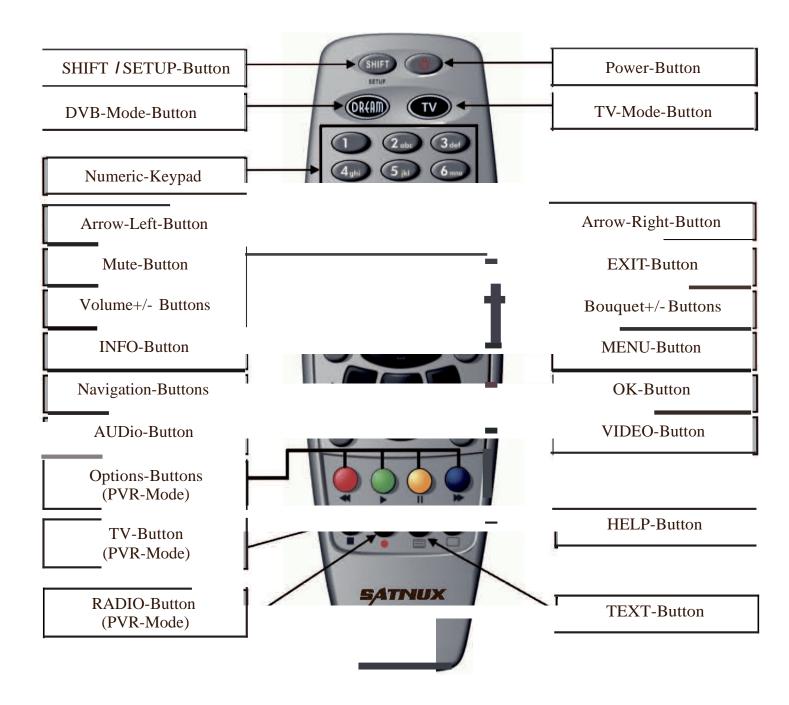
Power supply connector

Plug the power cable of the power supply that came with your SATNUXbox into power outlet. Connect your power supply to your SATNUX. You must not connect the power plug of the power supply to anything other than a socket that supplies 230V/50Hz.

Digital audio output (Toslink)

You can connect your SATNUX with an optical (Toslink) cable to your HiFi-Amplifier or DSP. The AC3 signal is also available at this port in case the selected channel transmits Dolby Digital signals.

1.4 Remote control

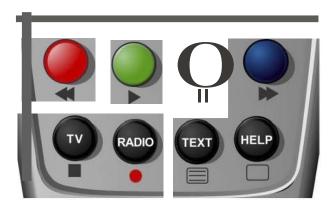


Important notes about operation

All functions of the SATNUX can be controlled via OSD-Menu (On-Screen-Display). This makes the handling of the SATNUX very easy for you. All options are indicated by four colored dots or beams (red, green, yellow, blue) in the OSD-Menu and can be started with the Option-Buttons on the Remote Control.

Depending on the chosen Menu, these options do vary.

The Options-Buttons of your remote control have multiple functions. You will notice control symbols below the four colored Options-Buttons, the TV- and the RADIO-Button. In PVR-Mode these buttons are used to control the digital recording according to their symbols. Pressing the VIDEO-Button on your remote control will activate the PVR-Mode. The Infobar will also indicate this. It changes from showing the channel information to showing the control symbols for the PVR-Mode. (also see 7.3.1. Instant recording)



All Menus and Service lists are closed with the EXIT-Button.



In general the menus are controlled using the Navigation-Buttons on your remote control.



To get into a submenu you have to press the OK-Button.

Explanation remote control buttons SHIFT / SETUP-Button The SHIFT/ SETUP-Button is used to preprogram the remote control to operate a TV. See chapter 15. TV-Mode setup. Power-Button The Power-Button switches your SATNUX on and off. See chapter 4.1 Turning your SATNUX on and off. DVB-Mode-Button The DVB-Mode-Button switches your remote control into SATNUX control mode. It will shortly light up once your press the button. TV-Mode-Button The TV-Mode-Button switches your remote control into TV control mode to control your preprogrammed TV. It will shortly light up once your press the button. See chapter 15. TV-Mode setup. Numeric-Keypad

Enter a service number to directly access the option by using the Numeric Keypad. The service numbers are on the left side of the service list.

The Numeric Keypad can also be used to enter the Teletext page number.

The Arrow-Left and Arrow-Right-Button enable you to jump back and forth between the last 20 channels you have watched. If you have selected a sub service (see *chapter 4.6*) you can use these buttons to switch to the next sub service.

During text input the Arrow-Left-Button will delete the character left to the current position and the Arrow-Right-Button will delete the character right to the current position.

Mute-Button	
	es the Volume. A crossed speaker symbol will appear on the bressing one of the Volume+/- Buttons brings back the
The Mute-Button deletes a chara	acter during text input.
EXIT-Button	
You can leave all menus and se	rvice lists by pressing the EXIT-Button.
Volume +/- Buttons	
The Volume +/- Buttons control pressing -will turn it down.	I the volume of the audio. Pressing +will make turn it up and
Bouquet+/- Buttons	
Pressing the Bouquet+/- Butto	ons will jump back and forth between the bouquets.
INFO-Button	
	e screen and you are in TV or RADIO-Mode, pressing the G information of the chose channel if it is available.
Navigation-Buttons	
In general the menus are contro To get into a submenu you have	lled using the Navigation-Buttons on your remote control. to press the OK-Button.
OK-Button	

By pressing the OK-Button you confirm a selection in the menu or service list navigation.

If no OSD menu is present on your screen, the Infobar is shown once you press the OK-Button.

MENU-Button

If you are in TV- or RADIO-Mode, pressing this button will bring up the OSD main menu. The OSD main menu has the following options:



You can switch to the needed option by pressing the Navigation-Buttons up or down.

If you are in the service list, pressing the MENU-Button brings up the service menu. The shown options may vary depending on the service list you selected.

AUDIO-Button

By pressing the AUDIO-Button you can choose the different audio tracks offered by the station.

VIDEO-Button

Pressing the VIDEO-Button activates the PVR-Mode. The Infobar will show the control symbols. You can instantly start recording by pressing the red Options-Button on your remote control.

Options-Buttons (PVR-Mode)

All possible options are shown by the four colored dots/blocks (red, green, yellow, blue) and can be activated by the Options-Buttons. These buttons have multiple functions and are also used to control the PVR-Mode.

Depending on the menu you currently are in the options will change and will be named differently.

TV-Button	
(PVR-Mode)	

Pressing the **TV-Button** activates the TV-Mode. In PVR-Mode this button is mapped with the stop function as indicated by the small square underneath it.

HELP-Button

Pressing the HELP-Button activates the Help menu.

RADIO-Button (PVR-Mode)

Pressing the RADIO-Button activates the RADIO-Mode.

TEXT-Button

The **TEXT-Button** activates the Teletext.

Installation

2.1 Turning the device on

Place the batteries inside the battery compartment of the remote control keeping in mind the right polarity.

Before using the SATNUX, please read the safety instructions (See chapter 1.1 Safety instructions)

Connect the LNB or antenna with a coaxial cable to LNB in or Antenna in at your SATNUX

See chapter 1.3.2 Explanation rear panel.

Connect the SATNUX to your TV using a DVI- or Scart-cable.

Plug in the power cable into the SATNUX and then into a 110V/60Hz or 230V/50Hz power socket.

If you are using a switchable power socket please shutdown your SATNUX into deep standby before switching off the power socket. See chapter 4.1 Turning your SATNUX on and off

If you switch on your SATNUX for the first time, you will see the setup wizard. The setup wizard will guide you through the first time installation. Follow the instructions on the screen. See chapter 3. Start wizard.

Please note that the factory setting for the video format is CVBS (FBAS).

3. Start wizard

The start wizard helps you with the basic setup of your SATNUX.

3.1 Video output selection

You will be shown different video output modes for roughly 10 seconds, after you have connected and switched on your SATNUX. Once you see a clear picture on your TV screen press the **OK-Button** to select it. If you prefer a different output than the selected one you can use the **Navigations-Buttons up/down** and the **OK-Button** to select it.

Pressing the **red Options-Button** will toggle the language.



You can choose from the following video output options:

- 1. Scart using a Scart cable
- 2. DVI using a DVI or DVI-to-HDMI cable

Select your desired option with the **Navigation-Buttons up** and **down.** Press the **OK-Button** to activate.

You are taken to the next step.



You can now select the video mode.

The possible options strongly depend on the video output mode you have selected in the step before. To learn more about the options refer to chapter 10.4 AIV Settings.

Select your desired option with the **Navigation-Buttons up** and **down.** Press the **OK-Button** to activate.

You are taken to the next step.



Your SATNUX will now test if you TV can display 50Hz at the before set resolution. If your screen stays black just wait 20 seconds and the picture will be automatically returned to 60Hz.

To start the test press the **OK-Button**.

You can see the result on your screen.



Finally you can adjust the screen using some test screens.

Select your desired option with the **Navigation-Buttons up** and **down.** Press the **OK-Button** to activate.

The video output should now be configured.

3.2 Language selection



Select your desired and language with the **Navigation-Buttons up** and **down.** Press the **OK-Button** to activate.



The start wizard takes you through the basic setup of your SATNUX.

Press the **OK-Button** on your remote control to get to the next step.



You will be asked if you want to set the basic settings for your SATNUX now or if you want to quit the start wizard.

Using the **Navigation-Buttons up** and **down** select your desired option and press the **OK-Button** to activate your selection.

If you choose "User wizard to setup basic features" you will be taken to the menu for the tuner configuration.

3.3 Tuner setup

Detailed information about the tuner setup can be found in chapter 11.1 DVB-S Tuner configuration



3.4 Service scan

Detailed information about the service scan can be found in chapter 11.4 Automatic scan





3.5 Parental Control

Refer to section 6.7 Parental control for further information about this feature.

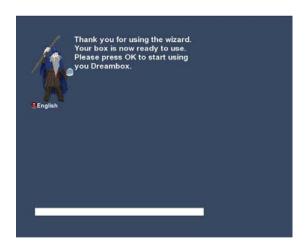


Entering the pincode





Finalizing the basic setup



4. Basic operation

4.1 Turning your SATNUX on and off

Use the Power-Sutton to turn your SATNUX on and off.

Pressing the Power-Sutton for three seconds saves all settings and prepares your SATNUX for disconnection from power.

Please wait for a note on the screen telling you that you can now disconnect your SATNUX from power.

Another way to achieve the same thing is to access the main OSD menu and selecting the "Standby/Restart" option. After that select the "Deep Standby" option and press the OK-Sutton.

Alternatively you can press the Power-Sutton on your SATNUX for 5 seconds. You have to make sure that no OSD menu is visible on the screen before you do so.



Please note that any recording timers will not be executed if your SATNUX is disconnected from power.



This is the Standby / Restart menu. Navigate to the desired option and confirm by pressing the OK-Button.

Standby

Puts your SATNUX into Standby mode.

Restart

Your SATNUX will be rebooted.

Deep Standby

Saves all settings and enables you to disconnect your SATNUX from power

4.2 Service selection

Pressing the Left/Right-Buttons on your SATNUX remote control will take you to the previous or next service.

Pressing the 0 on the Numeric-Keypad will enable you to skip back and forth between the two most recently watched services. This feature is quite useful during commercial breaks since it enables you to watch another channel and quickly check if your movies is back on.

Using the Navigation-Buttons left/right you can switch to the 20 last viewed services.

4.3 Changing channel using the service list



Pressing the Up/Down-Buttons on your remote control activates the service list.

Use the Navigation-Buttons up/down to select the desired service and press the OK-Button to change to the selected service.

4.4 Controlling the volume

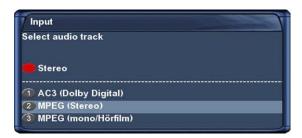


The Volume +/- Buttons control the volume of the audio. Pressing +will make turn it up and pressing -will turn it down.

Pressing the MUTE-Button mutes the volume. A crossed speaker symbol will appear on the screen.

4.5 Changing the audio track

Pressing the AUDIO-Button in TV or Radio Mode will reveal the "Audio" menu of the selected service.



Use the Navigation-Buttons up and down to move to desired audio track. Press the OK-Button to select.

The contents of this menu will vary from service to service.

4.6 Sub Services

The green dot in the Infobar appears if the selected station transmits sub services.



Pressing the **green Options-Button** in TV or Radio mode will reveal the sub services menu.

Use the **Navigation-Buttons up** and **down** to move to one of the sub services. Press the OK-Button to select.

You can now use the **Arrow-Left/Arrow-Right-Buttons** to toggle the subservices.

4.7 TV/Radio switching

Pressing the **RADIO-Button** activates the RADIO-Mode. By pressing the **TV- or EXIT-Button** you can quit the RADIO-Mode.

4.8 Teletext

Use the **Text-Button** to enter the Teletext and the **Exit-Button** to leave.

4.9 Subtitles

Press the **Menu-Button** to enter the main menu. Select "Subtitles" and press the **OK-Button**. A list with the available subtitles will show up. Use the **Navigation-Buttons up** and **down** to select a desired subtitle and press the **OK-Button** to activate.



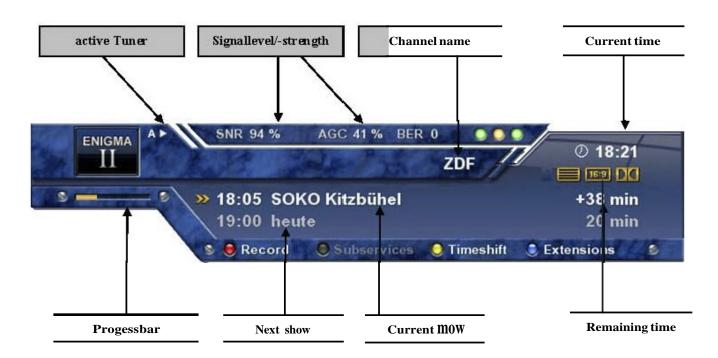
The screenshot on the left shows you an example of how a subtitle looks.

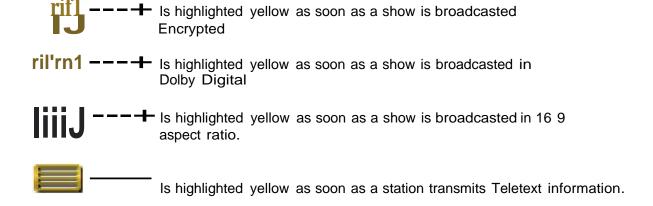
To deactivate subtitles process as described previously, just select deactivate subtitles instead of a subtitle page.

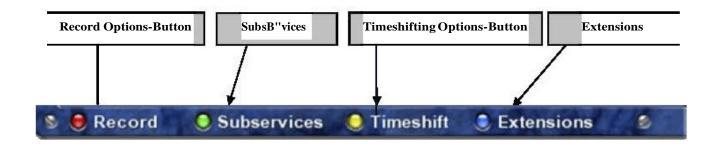
Note: Keep in mind that not every station offers subtitles. If no subtitles are available, the subtitle list will stay empty.

4.10 Infobar

The Infobar appears and disappears by pressing the **OK-Button** once, if no OSD menu is shown on your screen or when you change channels. The Infobar shows all necessary Information about the selected service.







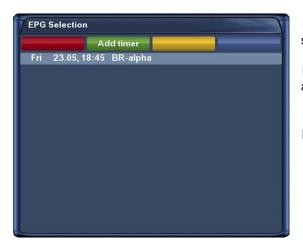
5. Electronic Program Guide- EPG



By pressing the **INFO-Button** in TV-Mode you are supplied with detailed information about the current show and by pressing the **Right-Button** afterwards about the next show.

Pressing the **yellow Options-Button** activates the "Channei-EPG" (See chapter 5.1) and pressing the **blue Options-Button** activates the "Multi-EPG" (See chapter 5.2).

The SATNUX automatically searches for similar broadcasts in the background. If one or more similar broadcasts are found the label "Similar" will appear in the red window.



Pressing the **red Options-Button** opens a listing of similar broadcasts.

By pressing the **green Options-Button** you can set a timer for this rerun.

For additional information about recording by timer please see chapter 7.3.3 Recording by timer.

5.1 Single-EPG



In this view you are supplied with detailed information about the currently selected channel's programming.

By pressing the **yellow Options-Button** your can ether sort the "Single-EPG" alphabetically or by time.

You can also access this view by pressing

- 1. the Info-Button for about 2 seconds
- 2. the **Navigation-Buttons up/down** to open the seNices list and then pressing the **Info-Button**.

This way you can very quickly and easily access the Single-EPG of every seNice.

5.2 Multi-EPG

Use the blue and yellow Options-Buttons to switch between the now, next and more views. Pressing the green Options-Button will give you the possibility to automatically copy the start and end time of the selected show into a recording timer..



If you have set the "Multi bouquets" option to "yes" (see chapter 10.2) a selection of you bouquets will appear. Select the bouquet for which you want the Multi-EPG view.

This view shows the currently airing shows on the services listed in the left column.

A progress bar showing the progress of the currently airing show is placed next to the service's name.

Using the Navigation-Buttons up and down you can select a service, just like in the service list, and change to the selected service by pressing the red Options-Button.



General overview of the following programming.



General overview of the upcoming programming for the following days. (Depending on the station up to one week).

5. Edit the channellist



Press the Menu-Button in the Multi-EPG view.

A

A window will appear where you can enter a time and date.

After you have entered the desired time and date press the **OK-Button** to activate you selection.



The Multi-EPG will be displayed according to your set time and date.

As a example we have selected 20:15. All shows starting at *I* which are already running 20:15 are displayed.

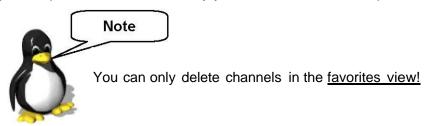
Note: The set time will be saved and used next time when you sort by time and date.

32 Edit the channellist

\Mlat is a bouquet?

A bouquet can be thought of something like a folder. Every channel equals a page in this folder and the pages are sorted into categories.

This way you can create a bouquet called "Kids", for example, under which you "file" all children's stations. Another example would be to create a bouquet called "Sports" where you put all sports channels. This way you can create several topic related bouquets.



You cannot delete the channels in the "All" view. The use of the "All" view is to keep an internal list of all available stations. If you start a new channel search the result would be saved to the "All" view for example. You favorites bouquet will stay untouched. This way you can easily add newly found channels from the ""All" list to your favorites bouquet. To see how it is done refer to section 6.2.

6.1 Adding a bouquet



To be able to add a bouquet you have to set the "Allow multiple bouquets" option to yes. Refer to section 10.2.

Pressing the **Up/Down-Buttons** on your remote control activates the service list.



Press the **blue Options-Button** to switch to the bouquet view.



By pressing the **Menu-Button** the "Channellist menu" will open up.

Navigate to the option "add bouquet".



Use the **Numeric-Keypad** on your remote control to enter the name for the new bouquet. The according letters are printed on button.

The **Mute-Button** and the **Arrow-Left/Arrow-Right-Button** deletes a character.

Press the **OK-Button** to add the new bouquet to your favorites list. You will be taken back to the "Channellist menu".

6.2 Add a service to favorites

If you want to add a service to your Favorites-view you can choose from services in the All-, Satellites- and Provider-views. You can switch views by pressing the red, green, yellow and blue Options-Buttons. At this point we only describe the process from the All-Bouquet since it is the same for the others.



Pressing the Up/Down-Buttons on your remote control activates the service list.

Press the red Options-Button to change to the Allview.

Use the Navigation-Buttons up/down to select the desired service and press the MENU-Button to open the "Channellist menu".



Navigate to the option "add service to bouquet".

If you are using more than one bouquet this option is named "add service to bouquet" instead and you will get a list of your bouquets afterwards.

You can choose to which bouquet you want to add the currently selected service.

If you are using only one bouquet which is the factory default, the service will be added to you favorites list.

6.3 Adding multiple services to a bouquet

You can select multiple services from the All-view to be added to the currently selected bouquet.



Pressing the Up/Down-Buttons on your remote control activates the service list.

Use the Bouquet+/- Buttons to switch to the desired bouquet. As an alternative you can press the blue Options-Button and select the desired bouquet.

After that select a service and switch to it by pressing the OK-Button.



By pressing the Menu-Button the "Channellist menu" will open up.

Navigate to the option "enable bouquet edit". The Allview will open up.



All services that are in the selected bouquet are highlighted red.

Use the Up/Down-Buttons to navigate to a desired service and press the OK-Button to select. The service will be highlighted red. Using this method you can select additional services that you want to add to the bouquet.

Once you have selected all services that you want to add, press the Menu-Button. The "Channellist menu" will open up.



Choose the "End bouquet edit" option All highlighted services will now be added to the bouquet that you selected in the beginning

If you are only using one bouquet, which is the default setting, the selected services will be added to you favorites list.

6.4 Remove a service from favorites



Pressing the **Up/Down-Buttons** on your remote control activates the service **list**

Use the **Navigation-Buttons up/down** to select the desired service and press the **MENU-Button** to open the "Channellist menu".



Navigate to the option "remove service".

The selected service will be deleted from your favorites list.

6.5 Moving a service to favorites



Pressing the **Up/Down-Buttons** on your remote control activates the service list.

Use the **Navigation-Buttons up/down** to select the desired service and press the **MENU-Button** to open the "Channellist menu".



Navigate to the option "enable move mode" and press the **OK-Button.**



Use the **Navigation-Buttons up/down** to select the service that you want to move and press the **OK-Button.**

The service will be highlighted red.



Use the **Navigation-Buttons up** and **down** to move the service to the desired position. Press the **OK-Button** to release the service and thus placing it at it's new position.

You can move services as long as the move mode is activated. To disable the move mode press the **MENU-Button** to get into the "Channellist menu" and chose the option "disable move mode" by pressing the **OK-Button**.

6.6 Adding a marker to favorites

You have the option to add makers within the favorites bouquets.



Pressing the **Up/Down-Buttons** on your remote control activates the service list.

Use the **Bouquet+/- Buttons** to switch to the desired bouquet. As an alternative you can press the **blue Options-Button** and select the desired bouquet.

Select a service. The marker will be added above the selected service.



By pressing the **Menu-Button** the "Channellist menu" will open up.

Navigate to the option "add marker".



Use the **Numeric-Keypad** on your remote control to enter the name for the new bouquet. The according letters are printed on button.

The **Mute-Button** and the **Arrow-Left/Arrow-Right-Button** deletes a character.

Press the **OK-Button** to add the marker to your favorites list. You will be taken back to the "Channellist menu".



As an example we have added two markers as shown in the picture on the left.

Use the Arrow-Left and Arrow-Right-Buttons to jump between those two markers.

6.7 Parental control

Parental control makes it possible to lock selected channels.

If no OSD menu is visible on your screen, press the Menu-Button to open the main OSD menu. Navigate to the option "Setup" and press the OK-Button to select.

- 1. Navigate to the "Parental lock" option and press the OK-Button.
 -)' The "Parental control setup" menu will open up.



Set the "Enable parental control" option to yes.

Under the "Parental control type" option you can choose between a blacklist and a whitelist.

Whitelist means that all channels NOT in the parental control list will be locked.

Backlist means that all the channels in the parental control list will be locked.



If you want to change the Pincode select the "Change service pin" option and press the **OK-Button.**



You now will be prompted to enter the old pincode and afterwards the new one.



You have to enter the new pincode twice to ensure you didn't make any typing errors.



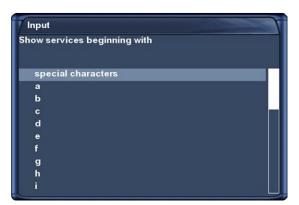
You will see this notice that the pincode has been changed. Press the **OK-Button** to get back into the Parental control menu.



If the entered pincode was false you will see this notice. Press the **OK-Button** to get back into the "Change service pin" menu and to enter the correct new pincode twice.



Now select the "Edit services list" option and press the **OK-Button.**



Use the **Navigation-Buttons up/down** to select the first letter of the channel that you want to lock or allow and press the **OK-Button.**

In this example we decided to lock the service called "sportdigital.tv". Accordingly we selected the "S" as the first letter.



The Parental control services Editor will open up. All services beginning with the letterS are shown.

Select "sportdigital.tv" and press the OK-Button.



A symbolized padlock will appear in front of the channel letting you know that it can only be watched when the right pincode is entered.

If you have selected whitelist under the "Parental control type" then this channel will be the only one that can be viewed without entering the right pincode.

Protecting the parental lock setup

Additionally you have the option to protect the parental control menu using a pincode.



Setting the "Protect setup" option to yes you will only be able to change parental control setting after you have entered the correct pincode.

Once you entered the wrong pincode three times in a row you have to wait 15 minutes before you can try again.

Note: You can use two different pincodes to protect the setup and the service list.

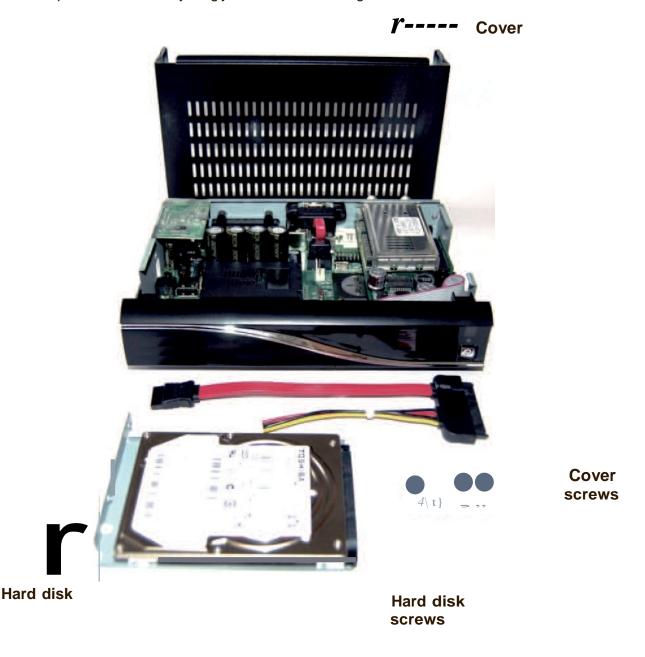
7. Hard disk operation

7.1 Mounting guidelines

This chapter describes how to mount a 2,5" SATA hard disk inside your SATNUX.

Please always adhere to ESD (Electrostatic Discharge) regulations when handling electronic devices. Make sure that you are grounded. Do not open the device in your living room or in any other rooms with carpeting or any other flooring that can carry an electrostatic charge. Remove all connection from the device. Only open the device with the tools depicted in 1 his manual. Try to avoid direct contact with the main circuit board. If all this doesn't mean anything to you or if you have too many question, please contact your dealer or technician. Also notice the warranty notes in chapter 1.1 Safety instructions.

This picture shows everything you need for installing the hard disk.



Parts list:

-)> 1x SATNUX (includes 4 phillips screws for the cover and 2 phillips screws for the hard disk cage).
-)> 1x SATA-Kabel for the hard disk (included in the shipping contents of your SATNUX
-)> 1x Phillips screwdriver (not included)
-)> 1x 2,5" SATA hard disk of your choice (not included)
-)> 4x Hard disk screws (included in the shipping contents of your SATNUX)

Action:

1. Remove these 2 screws on the rear panel



2. Remove this screw at the right side of the device.



3. Remove this screw at the left side of the device.



4. Lift the cover on the sides on slide it backwards.





5. Remove the 2 screws from the hard disk cage.



Remove the hard disk cage by lifting it upwards.

Now you need the Phillips screwdriver, the hard disk cage, the 4 hard disk mounting screws and your hard disk.

6. Attach the hard disk cage to the hard disk.

Pay attention to the correct mount of the hard disk in the hard disk cage.

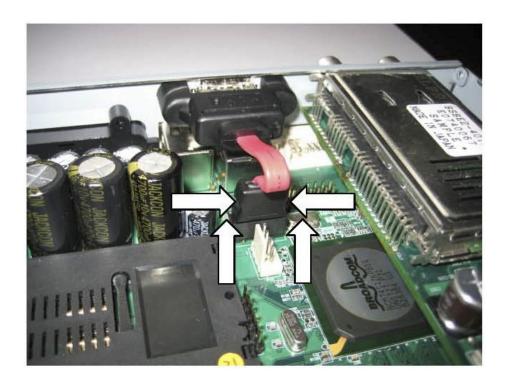




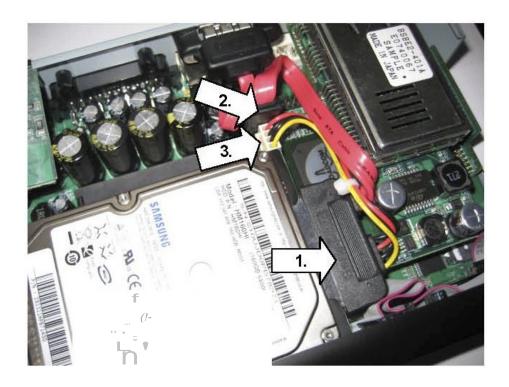


with screws

7. **Carefully** pull the SATA connector upwards with your thumb and index finger as shown below.



8. Connect the big black plug of the included SATA cable to your harddisk (Marker 1) and insert the hard disk cage back into your SATNUX. Connect the other end of the red SATA cable (Marker 2) to the socket from which your previously removed the eSATA cable. Connect the white power plug (Marker 3) to the white socket below the SATA socket.



9. Make sure that the cables are not bend too much.



Screw the two screws back onto the hard disk cage. (see step 5.)

Slide the cover from the rear back onto the device.

Screw the one screw on each side and the two screws on the rear back into place.

Reattach all connector to your SATNUX. Attach the power cord as last.

Note

Before you can use the hard disk your have to initialize it first. See section 7.2.1 to learn how it's done.

7.2 Management

If no OSD menu is visible on your screen, press the Menu-Button to open the main OSD menu. Navigate to the option "Setup" and press the OK-Button to select.

1. Navigate to the option "System" and press the OK-Button

The "System" menu will open up.

- 2. Navigate to the option "Harddisk..." and press the OK-Button
- 3. Navigate to the "Harddisk setup" option and press the OK-Button



You now can set the duration of time after which the harddisk will be put into standby-mode.

You can select from:

- -No standby
- 10 or 30 seconds
- 1, 2, 5, 10, 20 or 30 minutes
- 1, 2 or 4 hours

Once you have selected the desired time press the OK-Button or the green Options-Button to get back into the harddisk menu.

7.2.1 Initialization

If no OSD menu is visible on your screen, press the Menu-Button to open the main OSD menu. Navigate to the option "Setup" and press the OK-Button to select.

- 1. Navigate to the option "System" and press the OK-Button
 - ;> The "System" menu will open up.
- 2. Navigate to the option "Harddisk... " and press the OK-Button
- 3. Navigate to the "Harddisk setup" option and press the OK-Button

Navigate to the "Initialization" option and press the OK-Button.

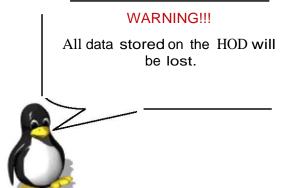


If you have installed another hard disk this option will differ from the one depicted!



By pressing the red Options-Button you will initialize (format) the hard disk. After you confirm the safety question the initialization process starts.





7.3 Recording

7.3.1 Instant recording



Press the red Options-Button.

You have five available options:

- -Add recording (indefinitely)
- Add recording (stop after current event)
- -Add recording (enter recording duration)
- -Add recording (enter recording endtime)
- Don't record

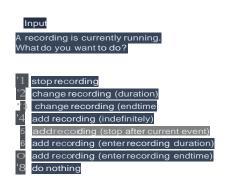
Use the **up/down-Buttons** to navigate to you desired selection and press the **OK-Button** to select.

A ongoing recording is indicated by a flashing symbol in the Infobar (see chapter 4.10).

During a recording you can watch another service, view a previously recorded movie or add an additional recording.

The number of simultaneous recordings depends on the number of services residing on a transponder ¹.

It is possible to make up to four simultaneous SDTV or two HDTV recordings.



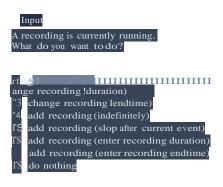
Pressing the **Up/Down-Buttons** on your remote control activates the service list. The recording continues in the background.

Once a recording is started, no matter if manually or by timer (see chapter 7.3.3) it will be signaled by a note on the screen.

¹ Every services resides on a so called transponder. A transponder contains a number of services. Example: ZDF-Transponder via satellite

This tran sponder contains the services: 3sat, Kika, ZDF, ZDFdokukanal, ZDFinfokanal, ZDFtheaterkanal If you now start a recording on "ZDF" only the services on the same transponder on this tuner are available any more. The unavailable services will be marked grey in the services list, once a service on the tuner is in use either by recording.

7.3.2 Stop recording



Switch to the service which recording you want to stop.

Press the red Options-Button, select the "Stop recording" option and press the OK-Button to select.

The recording will be stopped immediately.

7.3.3 Recording by timer

With the help of a timer you can record shows (if you have a hard disk installed). You are offered two different ways to program a timer, the manual way of via the EPG.

If no OSD menu is visible on your screen, press the Menu-Button to open the main OSD menu. Navigate to the option 'Timer" and press the OK-Button to select.



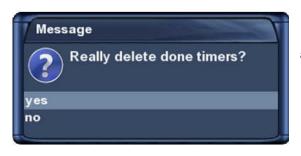
You see the "Timer Editor" menu.

Pressing the red Options-Button will delete a timer. The green Options-Button adds a timer, the yellow Options-Button toggles active on and off (only possible in waiting status) and the blue Options-Button removes finished timers from the list.

To edit an existing time select it and press the OK-Button.

The status of a timer is shown on the right side:

- -waiting means: still coming up
- recording means: recording right now
- done means: recording finished
- -the red X indicates that a timer was deactivated



If you pressed the blue Options-Button you will be asked if you really want to delete the finished timer.

Use the Navigation-Buttons up and down to select. Press the OK-Button to activate.

Manual programming



Press the green Options-Button to add a new timer.

You can choose between two different timer types. "Record" to record the desired show or "Zap" to automatically switch to the service.

As repeat type you can choose between "once" and "repeated"

The repeat type "repeated" offers you the following options:

daily

weekly with choice of weekday

Monday through Friday

user defined

For all four options you can set a date for the first execution of the timer

You can decide what should happen after the recording finishes by selecting the "After event" option. You can choose between "do nothing" to keep you SATNUX in the same state as before the recording or "Go to deep standby" to shutdown your SATNUX once the timer is done.

Set you desired option by pressing the Navigation-Buttons up/down and left/right and press the green Options-Button to save the timer.

Programming via EPG



Change into on of the EPG views as described in chapter 5.

By pressing the green Options-Button you have the option to automatically add the selected show with it's start and end time as a timer.

All other options are the same as in the manually added timer.

Press the green Options-Button to save the timer. You will be taken to the "Timer Editor" menu.

If no OSD menu is visile on the screen you can find the timer editor by pressing the Menu-Button and selection the "Timer" option from the main OSD menu. Press the OK-Button to acces it.

7.3.4 Timeshift

Once you started an instant recording you can fast-forward and rewind while recording as long as you have already recorded at least 1 minute long.

Press the yellow Options-Button to pause the screen (video and audio will pause). The recording will continue in the background. Press the yellow Options-Button again to resume watching.

This way you won't have to miss anything ever again if you quickly have to catch a phone call.

The Timeshift-Mode can be exited by pressing the TV-Button.



You will be asked if you want to quit the Timeshift-Mode.

Use the Navigation-Buttons up and down to select. Press the OK-Button to activate.

7.4 Watch a recording

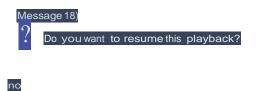


Press the Video-Button to get to the selection of recordings.

Use the Navigation-Buttons up and down to select a recording. Press the OK-Button to start playing it.

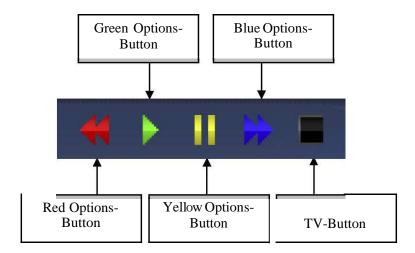
During replay you can see the control symbols in the Infobar.

Press the Navigation-Buttons up and down or the Video-Button to get back to the list of recordings.



If you have previously watched the movie you will be asked to continue where you left off when you start watching it the next time. If you do not make a selection within 10 seconds the window will disappear and the movie starts from the beginning.

In PVR-Mode the Options-Buttons are mapped as described below:



Keep in mind that you have to be in the PVR-Mode to use these options. You can check this by pressing the OK-Button. The Infobar will reveal and should show the depicted control symbols. If they are not shown you simply have to press the Video-Button once again.



Red Options-Button = Rewind

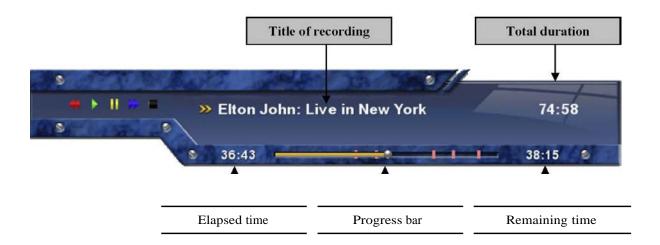
Green Options-Button = Play

Yellow Options-Button = Pause

Blue Options-Button = Forward

TV-Button = Stop

The Infobar does not have to be visible to use the PVR-Mode.





The PVR-Mode can be exited by pressing the TV-Button. You will be asked if you want to stop the replay of the recording.

If you choose "Yes" you will be taken back to the last channel you were watching.

Skipping in a recording

Button	Time	Button	Time
1	10 sec. back	3	10 sec.forward
4	1 min. back	6	1 min. forward
7	5 min. back	9	5 min. forward

Spooling in a recording

The following speeds for spooling in a recording are available:

- > Forward (blue Options-Button): 2x,4x,Sx,16x,32x,48x,64x,128x
- > Back (red *Options-Button*): 8x,16x,32x,48x,64x,128x

Every press on the button increases the speed by one step.

7.5 Setting a marker (Bookmarks)

Fast forward to the point where you want to add a marker and press the 0 on the Numeric-Keypad

This will set a marker at the desired point



The red dashes in the timeline correlate to a marker.

Skip to a marker

You can directly skip to a previously set marker during playback

Press the Arrow-Left-Button to jump to the pevious marker or the Arrow ight-Button to jump to the next marker.

To delete a marker skip to it as described above and press the 0 on the Numeric-Keypad

7.6 Delete a recording



Press the **Video-Button** to get to the selection of recordings.

Use the **Navigation-Buttons up** and **down** to select a recording. Press the **Menu-Button.**



Use the **Navigation-Buttons up** and **down** to select "Delete" and press the **OK-Button.**



You will be asked if you want to delete the recording. As a control feature the name of the recording is displayed as well.

Choose "Yes" and you will be taken back to the selection of recordings.

7.7 Movielist options

To access the Movielist menu press the Video-Button and then the Menu-Button.



Sorting options

You have the choice between two different sorting options:

- 1. Alphabetic sort
- 2. Sort by date

List styles

You have the choice between different list styles:

- > List style default
- > List style compact with description
- > List style compact
- > List style single line
- > Show extended description

List styles



List style default



List style single line



List style compact with desciption



List style default with extended desciption



List style compact

8. Teletext

You are in the TV or Radio mode.

Press the **Text-Button** to enter the Teletext.

Keep in mind that not every station transmits Teletext!

Teletext- regular navigation:

If you are viewing any Teletext page you can enter the interactive mode by pressing the **OK-Button**. Use the **Navigation-Buttons** to select a text page number and press the **OK-Button** to call this page. You don't need to type in a text page number in this mode, but it is still possible.

Press the EXIT-Button to exit.

Press the **Mute-Button** a couple of times to toggle between transparent-mode, invisible-mode and full mode. The alpha-mode shows the picture from the running program through the text pages. The invisible-mode shows the complete picture from the running program without exiting the Teletext. The full-mode brings back the text page.

Press the **Volume-up-Button** to toggle between double high from the upper half, double high from the lower half and full view text page.

Press the **Volume-down-Button** to activate or deactivate the PIG-Mode (Picture in Graphics). Same view from Text page and Program picture. (best results are show on 16:9 TV's during 4:3 transmission).



Teletext configuration menu:

If the Teletext page 100 is shown you can press the **MENU-Button** to enter the Teletext configuration menu.

You have the following options:

Teletext- Selection:

Select the "Search" option and press the **OK-Button** to start searching for Teletext information on other services without having to leave the service that you currently are watching. After the search is finished you can use the **Navigation-Buttons left** and **right** to select the Teletext of another service without having to switch services. Press the **OK-Button** to select the desired Teletext. This option is only available if more than one service on the current satellite transponder actually transmits Teletext information. If this is not the case you cannot make a selection.

Screen format:

Standard mode 16:9 = on/off

Enabling this shows the TuxText in 16:9 Aspect Ratio. Press the OK-Button to enable or disable this option. The default setting is disabled.

Text/TV mode 16:9 =on/off

Enabling this, switches the TV to 16:9 Aspect Ratio if the PIG-Mode is activated with the Volume-down-Button. Press the OK-Button to enable or disable this option. The default setting is disabled.

Note:

On some older 4:3 TV's these Modes may not work. If enabled, it could happen, that your TV switches away from the VCR or AIV socket.

If you are using a 4:3 TV, we suggest not to enable these modes.

Brightness:

Here you can adjust the brightness of your Teletext. Press the Navigation-Buttons left or right to adjust the brightness.

Transparency:

Here you can adjust the transparency value of your Teletext. Press the Navigation-Buttons left or right to adjust the alpha value.

National characterset:

automatic recognition = on/off

The national codepage detection is used to display the teletextpages with the right letterset for your location. Press the OK-Button to enable or disable this option. The default setting is enabled. If disabled, use the Navigation-Buttons left or right, to choose your codepage.

For further information see www.tuxtxt. net

9. Sleep timer

Using the sleep timer you can put your SATNUX into standby or turn it off after a predetermined amount of time.

Press the blue Options-Button and select the option "Sleep Timer".



<u>Shutdown SATNUX after</u>: Set the number of minutes after you wish the predetermined shutdown action to be executed.

Timer status:

Set this option to "enabled" to activate a set sleep timer or to "disabled" to deactivate a set sleep timer.

Press the **red Options-Button** to change the status.

Sleep timer action:

Select "Deep Standby" to completely turn off you SATNUX or "Standby" to put it into standby mode.

Press the green Options-Button to toggle the sleep timer action.

Ask before shutdown:

If this option is set to "Yes" a safety window will appear once the sleep timer is executed asking you if you really want to turn off your SATNUX.

Press the **yellow Options-Button** to toggle this option.

Once you have set all options to your liking press the **OK-Button** to save your settings.



A short note will tell you that the sleep timer has been activated.

10. Setup

10.1 Language

If no OSD menu is visible on your screen, press the Menu-Button to open the main OSD menu. Navigate to the option "Setup" and press the OK-Button to select.

- 1. Navigate to the option "System" and press the OK-Button.
 -)> The "System" menu will open up
- 2. Navigate to the option "Language" and press the OK-Button.
 -)> The "Language" menu will open up



Select your desired and language with the Navigation-Buttons up and down. Press the OK-Button to activate.

The Exit-Button will quit this menu.

10.2 Customize

If no OSD menu is visible on your screen, press the Menu-Button to open the main OSD menu. Navigate to the option "Setup" and press the OK-Button to select.

- 1. Navigate to the option "System" and press the OK-Button.
 - The "System" menu will open up.
- 2. Navigate to the option "Customize..." and press the OK-Button.

Setup modes:

There are three different user modes: Simple, Intermediate and Expert. This gives you the possibility to set the level of options to your needs. Intermediate is the default setting. We will not explain the expert mode in detail in this manual.

Simple mode:



Margin before record (minutes):

Set the desired forerun in minutes for a recording.

Margin after record:

Set the desired lag in minutes for a recording.

Infobar timeout:

Set the desired time after which you want the Infobar to disappear. You can choose between one and ten seconds or "no timeout".

Intermediate mode:

These settings supplement the settings in simple mode.



Recordings always have priority:

If this option is set to "Yes" your SATNUX will automatically s\Nitch to the service which is supposed to be recorded incase there is a conflict \Nith an existing timer. If you set this option to "No" you will be asked if you want to s\Nitch to the service which is supposed to be recorded.

Show positioner movement:

If you own a satellite dish \Nith a positioner you can see a flashing symbol of a satellite dish on your screen if you set this option to "yes".

Enable multi bouquets:

Set this option to "Yes" if you want to use multiple bouquets.

Change bouquets in quickzap:

If this option is set to "Yes" you will automatically be taken to the next bouquet while changing channels once you have reached the end of one bouquet.

Alternative radio mode:

Set this option to "Yes" if you want the handling in the Radio mode to be the same as in the 1V mode.

Action on long powerbutton press:

Set your desired option what is supposed to happen if you push the Power-Button for a few seconds. The possible options are "show shutdown menu" and "immediate shutdown".

10.3 Setting the time zone

If no OSD menu is visible on your screen, press the Menu-Button to open the main OSD menu. Navigate to the option "Setup" and press the OK-Button to select.

1. Navigate to the option "System" and press the OK-Button.

The "System" menu will open up.

2. Navigate to the option "Timezone... " and press the OK-Button.



The "Time zone" menu will open up.

Use the left/right-Buttons to select the desired time zone.

Press the green Options-Button to save the setting or the red Options-Button to discard them.

10.4 AN Settings

If no OSD menu is visible on your screen, press the Menu-Button to open the main OSD menu. Navigate to the option "Setup" and press the OK-Button to select.

- 1. Navigate to the option .. System.. and press the OK-Sutton.
 -)> The ..System.. menu will open up
- 2. Navigate to the option ... NV settings ... and press the OK-Sutton.



Video output:

This option selects to which output the video signal will be sent to.



DV

If you have connected your TV to the D\il output of your SATNUX set the "Output type" option to DVI.

DVI-PC

If you have connected the TFT-Monitor of your PC to the D\il output of your SATNUX set the "Output type" option to D\il and the "Mode" option to PC_



Searl

If you have connected your TV to the Scart output of your SA.TNUX set the "Output type" option to Scart.

Mode:

Use the Navigation-Buttons I efVright to select the desired screen resolution. This option is only available for the output type DVI.

Refresh Rate: (This option is only available for the output types DVI)

Select the refresh rate supported by your TV sereen. This sieither 50Hz or 60Hz.

Oisplay 4:3 content as:

Pillarbox

4:3 shows will be shown in full height on a 16:9 screen and you will have black bars on both sides.

Pan&Scgn

4:3 shows will be shown in full width on a 16:9 screen and a bit will be cut off on the top and bottom.

Just Scale

4:3 shows will be shown in full height on a 16:9 screen and are stretched to fit the width of your screen.

Nonlinear

Only the outer parts of the picture are stretched to prevent the centerfrom being distorted. You will still have a full screen picture.

AC3 default:

If a pro gram is transmitted with an AC3 audio track (e.g. Dolby Digal). the SATNUX switches automatically to this audio track.

Volume control of ftC3 signals only works if ftC3 downmix is activated. Please keep in mind that ftC3 downmix will disable the output of real AC3 signals on every audio out, even on the SIP DIF output

AC3 downmix:

If you're watching a show with a AC3 audio track it will be changed i1to a stereo signal. Set this option to "yes" if your have an AV-Receiver that does not support Doby Digital.

These options are only available if the output type is set to "Scart":

Mode:



Searl

Select the standard supported by your TV screen. This is usually either PAL or NTSC. If you own a TV screen which supports both modes you can also select the Multi option. You TV screen will automatically switch depending on the input signal. These options are only available ifthe output type is set to "Scart".

Aspect ratio:

Automatic (Standard!

4:3 shows will be shown as 4:3 and 16:9 shows will be shown as 16:9.

Ojspla1t 16 .g cqn(fmt as-

Letterbox

16:9 programs will be displayed on 4:3 TV's wh black beams at top and bottom.

Pan&Scan

16:9 programs will be zoomed to full hight on 4:3 TV's, parts of the picture on the left and right side will cut off.

Just Scale

4:3 shows will be shown in full height on a 16:9 sereen and are stretched to fit the width of your screen.

16:9 UIIa 16:10:

Display 4:3 content as:

Pie ase see previous page.

Color format:

- CVBS (FBAS),
- RGB (Red, Green, Blue separated),
- SVideo (Color- and Brightness signal separated)

WSS 01>4:3:

Check the checkbox to disable zooming on some 16:9 TV's during 4:3 transmissions.

Press the green Options-Button to save the setting or the red Options-Button to discard them.

You are taken back to the "System" menu.

Note

Please keep in mind the possible settings of your IV. Some 16:9 IVs automatically zoom on 4:3 contentto give you a full sene en picture. Refer to your IV's instruction manual for retenenee.

10.5 OLEO-Display

If no OSD menu is visible on your screen, press the Menu-Button to open the main OSD menu. Navigate to the option "Setup" and press the OK-Button to select.

1. Navigate to the option "System" and press the OK-Button.

The "System" menu will open up.

2. Navigate to the option "Display setup..." and press the OK-Button.



Using the Navigation-Buttons left and right you can set the brightness of the OLEO-display.

"Standby" set the brightness value for standby.

If" Invert" is set to "Yes" the polarity of the OLEO-display will change.

All changes will take effect immediately.

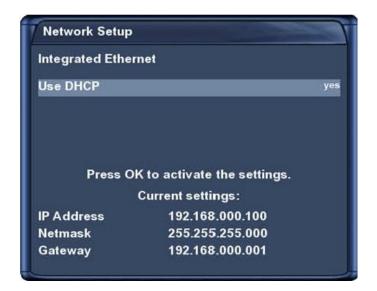
Press the green Options-Button to save the setting or the red Options-Button to discard them.

You are taken back to the "System" menu.

10.6 Network

If no OSD menu is visible on your screen, press the Menu-Button to open the main OSD menu. Navigate to the option "Setup" and press the OK-Button to select.

- 1. Navigate to the option "System" and press the OK-Button.
 - The "System" menu will open up.
- 2. Navigate to the option "Network..." and press the OK-Button.
- 3. Navigate to the option "Device setup..." and press the OK-Button.
- 4. Navigate to the option "Integrated Ethernet" and press the OK-Button.



S::'. J

If you are using a DHCP server in your LAN, configure the DHCP server so it does not assign the IP address used by the SATNUX. Otherwise an IP address collision is possible. Refer to the DHCP server's manual about how to configure a DHCP address pool.

Use the **Navigation-Buttons** and the **Numeric-Keypad** to change the values.

UseOHCP.

If enabled your SATNUX will get its IP from a DHCP server. If you are using a router to access the internet you usually have a DHCP server. Disable this option to set a static IP address.

IP Address:

Enter the IP address here.

Netmask:

Enter the subnet mask (Usually 255.255.255.0).

Gatewav:

Enter the router's IP address here, if the SATNUX is connected to the Internet over a router.

Nameserver:

Enter the DNS-Server's IP address here. DNS is used to translate a Domain name to an IP address. Normally, if the Type is set to LAN, there is no need for a DNS entry. If the SATNUX is connected to the Internet over a router, enter the router's IP address here.

Activate the network:

Press the **OK-Button** to save the setting and activate the network.

Nameserver Setup

If no OSD menu is visible on your screen, press the Menu-Button to open the main OSD menu. Navigate to the option "Setup" and press the OK-Button to select.

- 1. Navigate to the option "System" and press the OK-Button.
 -)- The "System" menu will open up.
- 2. Navigate to the option "Network... " and press the **OK-Button.**
- 3. Navigate to the option "Nameserver setup..." and press the **OK-Button.**

Nameserver:

Enter the DNS-Server's IP address of your LAN here. DNS is used to translate a Domain name to an IP address. Normally, if the Type is set to LAN, there is no need for a DNS entry. If the SATNUX is connected to the Internet over a router, enter the router's IP address here.

Press the **green Options-Button** if you want to add a seconds nameserver.

You can enter a maximum of two nameservers.

10.7 Skin

Selecting another skin will change the looks of your OSD(On-Screen-Display).

If no OSD menu is visible on your screen, press the **Menu-Button** to open the main OSD menu. Navigate to the option "Setup" and press the **OK-Button** to select.

- 1. Navigate to the option "System" and press the OK-Button.
 - > The "System" menu will open up.
- 2. Navigate to the option "Skin" and press the OK-Button.
 - > The "Skin" menu will open up.



Navigate to your desired skin and press the OK-Button.



To fully activate the skin the system needs to be restarted.



Use the **Navigation-Buttons up/down** to select your desired option and press the **OK-Button**.

10.8 Factory reset

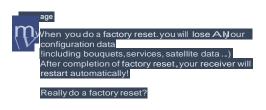
If no OSD menu is visible on your screen, press the **Menu-Button** to open the main OSD menu. Navigate to the option "Setup" and press the **OK-Button** to select.

1. Navigate to the option "System" and press the OK-Button.

The "System" menu will open up.

2. Navigate to the option "Factory reset" and press the OK-Button.

The "Factory reset" menu will open up.





You will be asked if you really want to reset all your settings to the factory defaults.

If you select "yes" all your settings and bouquets will be lost.

Afterwards your SATNUX will be restarted automatically.

11. Service searching

11.1 DVB-S Tuner configuration

If no OSD menu is visible on your screen, press the Menu-Button to open the main OSD menu. Navigate to the option "Setup" and press the OK-Button to select.

- 1. Navigate to the option "Service searching" and press the OK-Button.
 - > The "Service searching" menu will open up.
- 2. Navigate to the option "Tuner configuration" and press the OK-Button.
 - > The "Choose tuner" menu will open up.
- 3. Use the Navigation-Buttons up and down to select the "Socket A" and press the OK-Button.



11.1.1Single satellite-direct connection (DVB-S)

Use this type of configuration if you want to receive a single satellite with a Single Universal LNB. The coax cable is directly connected from you SATNUX to the LNB.

Please read the section 11.1 DVB-S configuration to learn how to get into this menu.



The "Satconfig" menu will open up.

Use the up/down-Buttons to navigate to the "DiSEqC-Mode" option and use the left/right-Buttons to select "Single".



Navigate to the option "Satellite".

Use to the Navigation-Buttons left and right to select the desired satellite and press the OK-Button.

You are taken back to the "Select slot" menu.

11.1.2Two satellites via ToneburstA/8 (DVB-S)

Use this type of configuration if you want to receive two satellites from one LNB each. It does not matter if you use one or two dishes to achieve this.

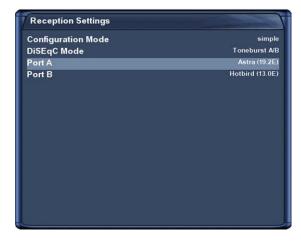
Connect the two coax cables form the two LNBs to a so-called Toneburst switch and connect the coax cable from the Toneburst switch to your SATNUX.

Please read the section 11.1 DVB-S configuration to learn how to get into this menu.



The "Satconfig" menu will open up.

Use the up/down-Buttons to navigate to the "DiSEqC-Mode" option and use the left/right-Buttons to select "Toneburst A/B".



For Port A and Port B select the desired satellites just as described in the *Single satellite- direct connection* section.

Make sure you know which satellite is connected to which input on the Toneburst switch.

If you do not find any services in the transponder scan later, exchange the two satellites in this list and try again.

11.1.3 Two satellites via DiSEqC A/8 (DVB-S)

Use this type of configuration if you want to receive two satellites from one Twin Universal or Quad Universal LNB. It does not matter if you use one or two dishes to achieve this.

In this case the LNBs are connected to a so-called Multiswitch from which the signal is via coax cabled to the satellite receivers (SATNUX) in your household.

Please read the section 11.1 DVB-S configuration to learn how to get into this menu.



The "Satconfig" menu will open up.

Use the up/down-Buttons to navigate to the "DiSEqC-Mode" option and use the left/right-Buttons to select "DiSEqC AIB".



For Port A and Port B select the desired satellites just as described in the *Single satellite- direct connection* section.

Make sure you know which satellite is connected to which input on the Toneburst switch.

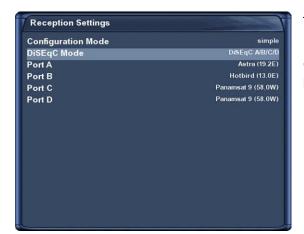
If you do not find any services in the transponder scan later, exchange the two satellites in this list and try again.

11.1.4 Four satellites via DiSEqC A/8/C/D (DVB-S)

Use this type of configuration if you want to receive four satellites from one Single Universal or Twin Universal LNB for four or eight parties. It does not matter if you use one or two dishes to achieve this.

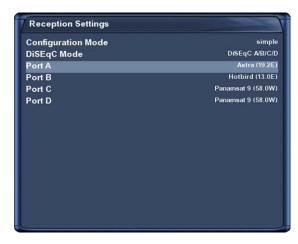
In this case the LNBs are connected to a so-called Multiswitch from which the signal is via coax cabled to the satellite receivers (SATNUX) in your household.

Please read the section 11.1 DVB-S configuration to learn how to get into this menu.



The "Satconfig" menu will open up.

Use the up/down-Buttons to navigate to the "DiSEqC-Mode" option and use the left/right-Buttons to select "DiSEqC A/B/C/0".



For Ports A, B, C and D select the desired satellites just as described in the *Single satellite- direct connection* section.

Make sure you know which satellite is connected to which input on the Toneburst switch.

If you do not find any services in the transponder scan later, exchange the two satellites in this list and try again.

11.1.5 Stab Positioner using USALS (DVB-S)

Use this type of configuration if you want to receive many satellites with a Stab positioner from a Single Universal LNB. The coax cable is directly connected from you SATNUX to the LNB.

Please read the section 11.1 DVB-S configuration to learn how to get into this menu.



The "Satconfig" menu will open up.

Use the up/down-Buttons to navigate to the "DiSEqC-Mode" option and use the left/right-Buttons to select "Positioner".

This menu is meant for a Stab positioner. You only have to enter the geographical details of your residence.

At http://www.heavens-above.com you can find the coordinates of your residence.



The rest is done automatically by your SATNUX with build-in USALS.

USALS is a model for calculating the position of all satellites in orbit with a margin of error less than 0.1 degrees. USALS was developed by the Stab company.

Everything is done automatically and does not require any technical know-how.

11.1.6 Stab Positioner without USALS (DVB-S)

Use this type of configuration if you want to receive many satellites without a Stab positioner from a Single Universal LNB. The coax cable is directly connected from you SATNUX to the LNB.

Please read the section 11.1 DVB-S configuration to learn how to get into this menu.



The "Satconfig" menu will open up.

Using the Navigations-Buttons left/right to select the "advanced" configuration.

Navigate to the option "Satellite". Use to the Navigation-Buttons left and right to select the desired satellite and.

Navigate to the option "Satellite" and press the Navigation-Button right.

Use the up/down-Buttons to navigate to the "DiSEqC-Mode" option and use the left/right-Buttons to select "1.2".



Navigate to the option "Use usals for this sat" and change the setting to "no" using the Navigation-Buttons left and right.

Navigate to the option "Stored position" and enter position of the selected satellite which is saved in the positioner by using the Numeric Keypad.

Refer to the instruction manual or your positioner for the number of the saved position.

11.2 DVB-C Tuner configuration

If no OSD menu is visible on your screen, press the Menu-Button to open the main OSD menu. Navigate to the option "Setup" and press the OK-Button to select.

1. Navigate to the option "Service searching" and press the OK-Button.

The "Service searching" menu will open up.

2. Navigate to the option "Tuner configuration" and press the OK-Button.

The "Choose tuner" menu will open up.



3. Use the Navigation-Buttons up and down to select the DVB-C Tuner and press the OK-Button.

The "Reception settings" menu will open up.

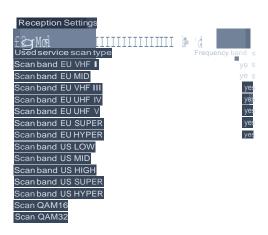
Frequency bands

This type of searching scans the frequencies used by most cable providers. This setting is the default.

Use the Navigation-Buttons left/right to set the "Used service scan type" option to "Frequency bands".

Press the OK-Button to save your settings.

You will be taken back to the "Select slot" menu.





Frequency steps

This type of searching scans the set frequencies step by step in a set increment.



Use the Navigation-Buttons left/right to set the "Used service scan type" option to "Frequency steps".

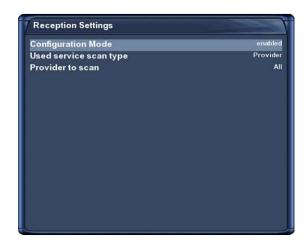
Frequency scan step size (kHz): Use the Numeric-Keypad to set the step increment.

Press the OK-Button to save your settings.

You will be taken back to the "Select slot" menu.

Provider

This type of searching scans using a list of known providers.



Use the Navigation-Buttons left/right to set the "Used service scan type" option to "Provider".

Press the OK-Button to save your settings.

You will be taken back to the "Select slot" menu

11.3 DVB-T Tuner configuration

If no OSD menu is visible on your screen, press the Menu-Button to open the main OSD menu. Navigate to the option "Setup" and press the OK-Button to select.

1. Navigate to the option "Service searching" and press the OK-Button.

The "Service searching" menu will open up.

2. Navigate to the option "Tuner configuration" and press the OK-Button.

The "Choose tuner" menu will open up.



3. Use the Navigation-Buttons up and down to select the DVB-T Tuner and press the OK-Button.

The "Reception settings" menu will open up.



Choose your region by pressing the Navigation-Buttons left/right.

If you have connected an active antenna and you want to run the antenna without it's original power supply set the "Enable 5V for active antenna" option to "On".

11.4 Automatic scan

If no OSD menu is visible on your screen, press the Menu-Button to open the main OSD menu. Navigate to the option "Setup" and press the OK-Button to select.

- 1. Navigate to the option "Service searching" and press the OK-Button.
 - > The "Service searching" menu will open up.
- 2. Navigate to the option "Automatic scan" and press the OK-Button.
 - > The "Automatic scan" menu will open up.



Set the "Clear before scan" option to "Yes" if you want to delete all services before the scan starts. Otherwise leave the setting to "No" which results in only new services being added to the channel list. To find the new services press the Navigation-Buttons up/down and afterwards the green Options-Button to access the "Satellites" view. You will find them under "New".

Use the Navigation-Buttons up/down to select a tuner and the Navigation-Buttons left/right to enable or disable the scan for the selected tuner.

Press the OK-Button to start the scan.



You can see the progress of the scan here.



The scan is done once you see this menu.

It shows how many channels were found during the scan.

Press the **OK-Button** to close this menu.

11.5 Manual scan

If no OSD menu is visible on your screen, press the Menu-Button to open the main OSD menu. Navigate to the option "Setup" and press the OK-Button to select.

- 1. Navigate to the option "Service searching" and press the OK-Button.
 - >> The "Service searching" menu will open up.
- 2. Navigate to the option "Manual scan" and press the OK-Button.



The "Service scan" menu will open up.

Use the Navigation-Buttons left/right to select the tuner on which you want to run the manual service scan.

All other options can be changed by using the Navigation-Buttons left/right and depend on the type of tuner that you want to run the scan on.

Press the OK-Button to start the manual scan.

12. Updating the software

12.1 Backing up your settings

Before installing newer software on your SATNUX you should backup your settings, otherwise they will be lost.

If no OSD menu is visible on your screen, press the **Menu-Button** to open the main OSD menu. Navigate to the option "Games/Piugins" and press the **OK-Button** to select.



Navigate to the option "Backup/Restore" and press the **OK-Button**.



Set the "Backup Mode" option to "only /etc/enigma2 directory".

Set the "Backup Location" option to "Harddisk".

Press the **blue Options-Button** to start the backup.



You will be prompted if you want to backup now.

Answer with "yes".

You will get an "Execution finished" message if the backup process was successful.

12.2 Restoring your settings

Please read chapter 12.1 to find out how to get into this menu.

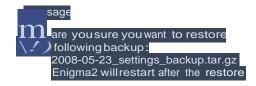


Press the **yellow Options-Button** to start restoring your settings.



You will be prompted with a list of backups that you have made so far.

Select the desired backup and press the yellow **Options-Button** to restore your settings.



You will be prompted if you want to restore now.

Answer with "yes".

The system will reboot with your desired settings.



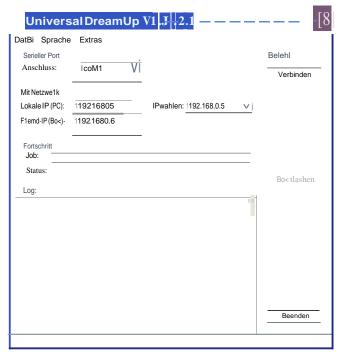
12.3 Installing new software

12.3.11nstalling new software using the SATNUXUP program

How do I install new software on my SATNUX?

Prerequisites:

- > PC with Windows operating system
- > SATNUXUP software (current version under http://www.TV-RADIO-SHOPPEN.DK)
- > 1 serial null modem cable
- > 1 network cable (optional)



Firstly disconnect your SATNUX from main power.

Start the DREAMUp software on your PC.

Select COM1 or COM2 depending on the port which the null modem cable is connected to.

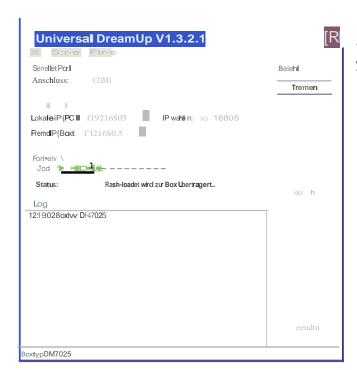
Check the "Use network" box if your PC and SATNUX are connected using a network cable.

The software update can be done without network support, but it takes at least 30 minutes.

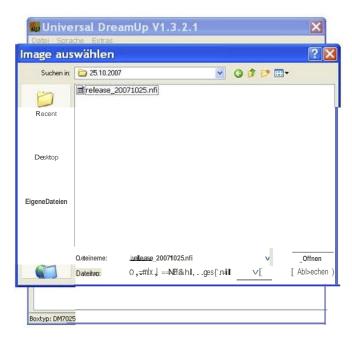
Enter your PC's IP under "Locai-IP (PC)"you're your SATNUX's IP under "Foreign-IP (Box)".



Click on the "Connect" button and reconnect your SATNUX to main power.



The flash loader will now be transferred to your SATNUX.

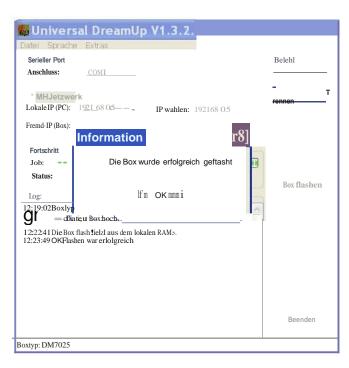


After the flash loader has been transferred to your SATNUX select the "Flash Box" Button in the DreamUp software.

Select the software image and click on the "Open" button.



The new software is now being transferred to your SATNUX.



If the process was successful you will get a "Box was flashed successfully" message.

Click on "OK" and on "Exit" afterwards.

Disconnect and reconnect your SATNUX from main power.

12.3.21nstalling new software using your web browser

Prerequisites:

- PC with an internet browser such as Firefox or den Internet Explorer
- > Current software for your SATNUX available at www.SATNUX.COM
-);> 1 Netzwork cable
-);> DHCP-Server
- 1 serial null modem cable (only if no DHCP-Server available)

You need a current software image. Such an image has the ending *.NFI for your SATNUX. It is not possible to install a different image type such as *.IMG tiles! Please do not try, it will not work.

You either need a DHCP-Server in your Network and a working boot loader or a serial null modem cable and a terminal program such as Hyperterminal.

Additionally you need a internet browser and a network cable. If you plan on connecting your SATNUX directly to your PC you will need a crossover network cable. If you plan on connection your SATNUX to your Hub/Switch/Router you will need a regular patch cable.

To be able to install a new software image on your SATNUX your SATNUX will need an undamaged 2nd Stage Loader, which is usually the case.

The next steps refer to a network with a running DHCP-Server. If this is not the case you will need to use the serial null modem cable to manually set the IP address of your SATNUX.

Turn your SATNUX. Use the Shutdown/Standby Menu and select "Deep Standby". Pull the power plug afterwards. The Standby mode is not enough!

2. You should now see the*** STOP*** text in the display. You can now let go of the Power-Button. Your SATNUX is in "Waiting-Mode".

If after waiting some time you still don't see an IP address, please check the settings of your DHCP-Server and the network cable connections. If this does not help you have to set the IP address manually using the serial console.

Open the internet browser, such as Firefor or Internet Explorer on your PC.

In our example the IP address your have to enter would look like this:

http:/1192.168.0.104

2. Select the "firmware upgrade" link in the displayed webpage.

You can select the desired softvvare image on the next page. To do so press the "Search..." button and select the image you have previously downloaded. Keep in mind that only *.nfi files will work. Refrain from installing an *.img image!

After you have selected your desired softvvare image click on the "FLASH!" button and wait till the progress bar reached the 100% mark.

Note: The progress bar only works if you have activated Javascript in your browser's settings. Please check beforehand that you have done so.

reambox DMBOO Web InlerfACe- finnware upgrade -Marilla firefox

After you have successfully finished flashing the new software image onto your SATNUX press the Power-Button on the front cover. Your SATNUX will turn off. Press the Power-Button again to start your SATNUX.

The new software should now be installed and running.

13. Systeminformation

13.1 Service

If no OSD menu is visible on your screen, press the Menu-Button to open the main OSD menu. Navigate to the option "Information" and press the OK-Button to select.



The "Information" menu will open up.

Navigate to the option "Service" and press the OK-Button.



This window shows detailed technical information about the current service.

Press one of the four Options-Buttons to get the following information:

red = Serviceinfo green= PIDs yellow =Transponder blue = Tuner status

Press the OK-Button to close this menu.

13.2 About (Hard- and Software)

If no OSD menu is visible on your screen, press the **Menu-Button** to open the main OSD menu. Navigate to the option "Information" and press the **OK-Button** to select.



The "Information" menu will open up.

Navigate to the option "About..." and press the **OK-Button.**



This window shows all relevant information about the Hard- and Software of your SATNUX.

Press the **OK-Button** to close this menu.

14. Troubleshooting

Problem	Possible cause	Solution
	Faulty LNB	Check wiring and connections
Beamlike blackouts in the video	Wrong Tuner setting	Exchange LNB
	Dish aligned incorrectly	Review settings (see 11.1 DVB-S configuration)
	Heavy rain or snow	Realign dish
	Dish aligned incorrectly	Remove snow from dish
	Dish is too small	Realign dish
No reception on a channel that	An obstacle between dish and	Install larger dish
was working before	Dish aligned incorrectly or faulty	Reposition dish so it has a clear "view" towards the satellite
You cannot record anything anymore	Channel is transmitted in a new slot	Check dish
	The transmission of the channel was terminated	Start service scan (see chapter 11)
	Hard disk is full	
SATNUX does not react	Batteries are inserted incorrectly	Delete no longer needed recordings
	Batteries are empty	Remove batteries and check polarity
	Wrong remote control mode	Insert new batteries
	Software is not reacting	Press SATNUX-Mode or TV- Mode button
	SATNUX is locked up	Reboot SATNUX
		Reboot SATNUX

15. TV-Mode setup

A four digit device code is selected from the device list and entered into the remote control. The most recent device list can be found in the download center on our website.

Homepage www.satnux.com

SHIFf / SETUP-Button



Numeric-Keypad

15.1 Programming the remote control

Press the TV-Mode-Button once.

Press the SHIFT/Setup-Button for 3 seconds, the TV-Mode-Button will flash twice.

Use the Numeric-Keypad to enter the four digit device code into the remote control. The TV-Mode-Button will flash once for every digit you enter. Once you have entered all four digit the TV-Mode-Button will flash twice.

The remote control exits the programming mode automatically.

If no code is entered within 10 seconds the remote control will exit the programming mode automatically.

16. Technical data

300 MHz MIPS Prozessor

Linux operating system

MPEG2 / H.264 Hardware decoding (DVB compliant)

1 x Smartcard-Reader

10/100 Mbit compatible Ethernet Interface

Internal SATA Connector: Support for all regular hard disks (2,5" SATA) or use it as the external eSATA connector

2x USB 2.0 port

DVI

Serial V.24/RS232 port

Tuner variations NIMs (DVB-S, DVB-C, DVB-T)

Tuner Module, Plug&Piay

256 MByte RAM

64 MByte Flash

S/P-01 F optical digital audio out

1 x Scart-Output (RGB, FBAS or S-Video)

External 12V power supply (DVE Modell: DSA-36W-12)

Additional info:

085-Tuner with DVB-52:

Frequency Range: 950-2150 MHz

Demodulation DVB-S (QPSK); DVB-S2 ((8PSK,QPSK) Symbol ate DVB-S: 2 ... 45 Mbaud/s, SCPC/ MCPC

DVB-S2: 10-31 Mbaud/s (8PSK), 10-30 Mbaud/s (QPSK)

085-Tuner without DVB-52:

Frequency Range 950- 2150 MHz
Demodulation DVB-S (QPSK)
Signal Level - 65 dBm- 25 dBm
DBS-Tuner Input Connector F-Type female
Input Impedance 75 Ohm
Loop Through interner Loop Trough
AFC +/- 3 MHz
DVB-S:Viterbirates 1/2, 2/3, 3/4, 5/6, 7/8, automatical adjustment (K=7)
Roll-off Factor 35%

DVB/C-Tuner (plugable):

Input/Loop through Connector IEC 169-24, Female Frequency Range 50-870 MHz Signal Level Input -20-25dBm Demodulation QAM Constellation 16, 32, 64, 128 and 256 QAM Input Symbol Rate 7.252 Msps max.

DVB/T-Tuner (plugable):

Input/Loop through Connector: IEC 169-24, Female/Male Frequency Range: VHF(174- 230MHz), UHF(470- 862MHz)

Signal Level Input: -78 - 20dBm Aerial supply: 5V, max. 100mA

Demodulation: OFDM

Carrier Mode: 2k and 8k hierarchical/non-hierarchical

Constellation: QPSK, 16 and 64 QAM Guard Interval: 1/4, 1/8, 1/16 and 1/32

Video decoder:

Video Compression MPEG-2 and MPEG-1 compatible, H.264 Video Formats 4:3 / 16:9 Letterbox percolating for 4:3 TV-Device

Audio decoder:

Audio compression MPEG-1 & MPEG-2 Layer I and II Audio Mode Stereo, Dolby Digital

Frequency: 32 kHz, 44.1 kHz, 48 kHz, 16 kHz, 22.05 kHz, 24 kHz

Analog output:

Output Level LIR 0,5 Vss on 600 Ohm THO > 60 dB (1 kHz) Crosstalk< -65 dB

Digital output:

Output Level 0,5 Vss on 75 Ohm Sampled Data Filtering 32kHz, 44.1 kHz, 48kHz S/P-DIF-Output optical (AC3)





Video output:

Output Level FBAS 1 Vss +1-0.3 dB on 75 Ohm

Video parameter:

Input Level FBAS 1 Vss +1- 0.3 dB on 75 Ohm Teletext filter in conformity with ETS 300 472 Standard

TV-Scart:

Output: FBAS, RGB, S-VHS over OSD selectable

Serial Interface RS 232:

Type RS232 bidirectional
Bitrate 115,2 kBitls max.
Plug Connector SUB-D-9
Function Update of Firmware and Preprogramming

Ethernet:

100 Mbit compatible, bi-directional interface Function Update of Firmware and Preprogramming

SATA port:

Connection of an internal 2,5" SATA hard disk or connect an external hard disk on the eSATA connector

USB:

2x USB 2.0 Host Connector

LNB power and polarization per tuner:

LNB Current 500mA max. ; short-circuit-proof LNB Voltage vertical < 14V without load, > 11,5V at 400mA LNB Voltage horizontal < 20V without load, > 17,3V at 400mA LNB LNB shut-off at Standby-Mode

Count of active satellite positions:

DiSEqC V1.011.111.211.3 (USALS)

OLEO-Display:

The OLEO will lose its brightness after roughly 40.000 hours of operation.

If the loss of brightness is too strong after this period, the OLEO can be replaced with a new one.

Power consumption:

< 15W on 12V

Input voltage:

DC12V +1- 15%

Externes power supply: (DVE Modell: DSA-36W-12)

Input:

110-240V AC / 50-60Hz / 0,6A Output: 12V = / 2,0A

Physical specification:

Ambient Temperature +15°C ..+35°C Humidity < 80% Size (W x D x H): 374 mm x 230 mm x 75 mm Weight: 2,2 kg without HOD

17. Features

Single-EPG (Electronic Program Guide): sortable by date or alphabetically Automatic search for additional air dates of a show and easy recording them by timer

Multi-EPG: graphically and text-based

Timeshift

List of recordings: sortable by date or alphabetically and free choice of different views

Timer programming manually or by EPG

Individually configurable timers, e.g. single or recurring timers

DiSEqC 1.0/1.1/1.2/1.3 (USALS)

Channel change in less than a second

Start wizard for initial setup

Pre-installed service list for DVB-S

Support of favorite lists

full automatic channel scan

DVB/Teletext subtitle

Integrated Teletext with level 2.5 support

Radiotext / Rass (Infos unter www.rass.tv)

Parental control

Sleeptimer

Easy expansion of the base function with the use of Plugins

Remote controllable via Web-Interface and streaming of the TV-/Radio stations to any PC connected to the SATNUX through network

MP3 playback

Skinable OSD in many languages